

To: Nancy Stoner/DC/USEPA/US@EPA[]
From: "Machlin, Marc" <MACHLINM@pepperlaw.com>
Sent: Tue 5/29/2012 2:14:58 PM
Subject: Fracking ///// Isotopic Fingerprinting
[Salt Lake - FINAL DRAFT4.pdf](#)
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This is the power point from Exponent, a consulting firm active in the fracking area. I do not know whether there is anything in this presentation that you have not already seen.

This power point is a public document (presented at ABA meeting) and I would assume that it has influenced (and been influenced by) the industry groups involved in this issue.

From: Carroll, John
Sent: Thursday, May 17, 2012 4:30 PM
To: Carroll, John; Fracassi, Todd C.; Hayden, Andrea E.; Kissling, Kurt; Kouletsis, Nicholas M.; Luxton, Jane C.; Machlin, Marc; Narsh, Gregory; Sanford, AnnMarie; Skjoldal, Michelle M.; Walsh, William; Wilczak, Tom
Subject: FW: Isotopic Fingerprinting in Environmental Forensics

For those of you who wanted a copy of Dr. Mohsen's presentation, I am enclosing a copy of a similar presentation he made for the ABA.

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From: Farrukh Mohsen [<mailto:fmohsen@exponent.com>]
Sent: Friday, April 13, 2012 5:50 PM
To: Carroll, John
Subject: Isotopic Fingerprinting in Environmental Forensics

John,

Hope all is well.

At Exponent, we have been using isotopic analyses for fingerprinting contaminants. We have used this for understanding sources of VOCs. We have also used it to determine origin of Methane gas in Hydraulic Fracturing issues. I have enclosed a pdf version of our a presentation I made with one of colleagues at the ABA meeting in Salt Lake City last month. I would appreciate an opportunity to make a presentation at your office on Environmental forensics including isotopic finger printing. Please let me know if that would be of interest.

Thank you.

Farrukh

Farrukh Mohsen, Ph.D., P.E., M. ASCE

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